

Cherkasky Fusion Proteins Containing Antibody-, Antigen-, and Microtubule – Binding Regions and Immune Response – Triggering Regions**Patent Claims:****What is claimed is:**

1. Fusion proteins comprising specific antigen binding regions such as preferably EGF, FGF, CSF, MGF, IL – 15, IL – 2, or other ligands or their regions, as well as microtubule binding regions, such as preferably gephyrin, Tau, MAP, MID – 1, MBP, put MBD or PMBP, FLJ 31424 Fis or their regions and immune response triggering regions, such as preferably Fc of IgG, B 7.1, B 7.2 or their regions.
2. Fusion proteins comprising antibody binding regions, such as preferably Staphylococcal protein A (SPA), extracellular region of the Fc receptor CD 64 or their regions and microtubule – binding regions, such as preferably gephyrin, Tau, MAP, MID – 1, MBP, FL J 31424 Fis, or their regions.
3. Fusion proteins according to Claim 2, wherein immune triggering regions such as preferably Fc regions of immunoglobulin G or IgG, HLA – B 7.1 or HLA – B7.2 are contained.
4. Fusion proteins according to one of the above mentioned Claims, wherein long and very long spacer or linker regions, such as preferably polyglycine, polyproline are contained, or spacers comprising prolines and glycines.
5. Fusion proteins according to one of the above mentioned Claims, wherein at least one nucleic acid binding region, such as preferably RecA is contained.
6. Fusion proteins according to one of the Claims mentioned above, wherein at least one polysaccharide binding region, such as preferably cellulose – binding region of the CipA protein is contained.
7. Fusion proteins according to one of the claims mentioned above, wherein GFP, other fluorescent region, membrane penetration domaine, such as preferably the Gene – 3 – Protein of the bacteriophage fd, gp 41 or Tat protein of the HIV – 1 or at least one other region is contained.
8. Fusion proteins according to one of the claims mentioned above, wherein GST region, His tag or any other region for carry out of affinity purification is contained.
9. Fusion proteins, according to one of the above mentioned claims, wherein a cleavage site for any protease preferably for cleavage of GST or other tag, is contained.
10. Nucleic Acid and Amino Acid sequences, DNA vectors, cloning and expression systems for the fusion proteins according to one of the above mentioned claims, as well as all amino and nucleic acid sequences Seq. 1 – 12.